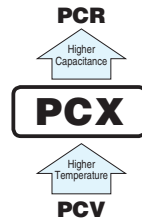


**PCX**

Chip Type, High Voltage / Long Life



- High reliability, High voltage (to 50V).
- Low ESR, High ripple current.
- Long life of 1500 to 3000 hours at 125°C.
- SMD type : Lead free reflow soldering condition at 260°C peak complete correspondence.
- Compliant to the RoHS directive (2011/65/EU,(EU)2015/863).
- AEC-Q200 compliant. Please contact us for details.



■ Specifications

Item	Performance Characteristics
Category Temperature Range	-55 to +125°C
Rated Voltage Range	16 to 50V
Rated Capacitance Range	5.6 to 390µF
Capacitance Tolerance	±20% at 120Hz, 20°C
Tangent of loss angle (tan δ)	Less than or equal to the specified value at 120Hz, 20°C
ESR (※ 1)	Less than or equal to the specified value at 100kHz, 20°C
Leakage Current (※ 2)	Less than or equal to the specified value . After 2 minutes' application of rated voltage at 20°C
Temperature Characteristics (Max.Impedance Ratio)	Z+125°C / Z+20°C ≤ 1.25 (100kHz) Z-55°C / Z+20°C ≤ 1.25
Endurance	The specifications listed at right shall be met when the capacitors are restored to 20°C after the rated voltage is applied for 3000 hours (φD = 6.3:1500hours) at 125°C.
Damp Heat (Steady State)	The specifications listed at right shall be met when the capacitors are restored to 20°C after the rated voltage is applied for 1000 hours at 60°C, 90% RH.
Resistance to Soldering Heat	After soldering the capacitor under the soldering conditions prescribed here, the capacitor shall meet the specifications listed at right. Pre-heating shall be done at 150 to 200°C and for 60 to 180 sec. The duration for over +230°C temperature at capacitor surface shall not exceed 60 seconds. In case peak temperature is 250°C or less, reflow soldering shall be two times maximum. In case peak temperature is 260°C or less, reflow soldering shall be once. Measurement for solder temperature profile shall be made at the capacitor top.
Marking	Navy blue print on the case top

Capacitance change	Within ± 20% of initial capacitance value (※3)
tan δ	150% or less of the initial specified value
ESR (※ 1)	150% or less of the initial specified value
Leakage current (※ 2)	Less than or equal to the initial specified value

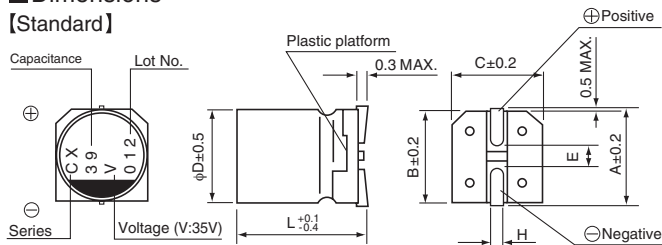
Capacitance change	Within ± 20% of initial capacitance value (※3)
tan δ	150% or less of the initial specified value
ESR (※ 1)	150% or less of the initial specified value
Leakage current (※ 2)	Less than or equal to the initial specified value

Capacitance change	Within ± 10% of the initial capacitance value (※3)
tan δ	130% or less than the initial specified value
ESR (※ 1)	130% or less than the initial specified value
Leakage current (※ 2)	Less than or equal to the initial specified value

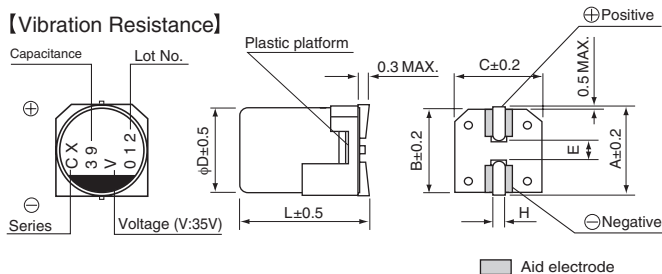
- ※ 1 ESR should be measured at both of the terminal ends closest where the terminals protrude through the plastic platform.
- ※ 2 Conditioning : If any doubt arises, measure the leakage current after the voltage treatment of applying DC rated voltage continuously to the capacitor for 120 minutes at 105°C.
- ※ 3 Initial value : The value before test of examination of resistance to soldering.

■ Dimensions

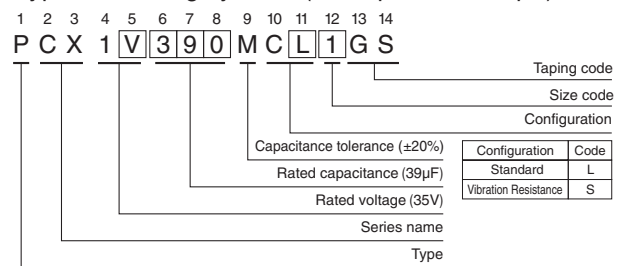
[Standard]



[Vibration Resistance]



Type numbering system (Example : 35V 39µF)



Standard	(mm)								Vibration Resistance (mm)				
Size	φ6.3×6L	φ6.3×8L	φ8×7L	φ8×10L	φ8×12L	φ10×8L	φ10×10L	φ10×12.7L	Size	φ6.3×8L	φ8×10.5L	φ10×10.5L	φ10×13.2L
φD	6.3	6.3	8.0	8.0	8.0	10.0	10.0	10.0	φD	6.3	8.0	10.0	10.0
L	5.9	7.9	6.9	9.9	11.9	7.9	9.9	12.6	L	7.5	10.0	10.0	12.7
A	7.3	7.3	9.0	9.0	9.0	11.0	11.0	11.0	A	7.3	9.0	11.0	11.0
B	6.6	6.6	8.3	8.3	8.3	10.3	10.3	10.3	B	6.6	8.3	10.3	10.3
C	6.6	6.6	8.3	8.3	8.3	10.3	10.3	10.3	C	6.6	8.3	10.3	10.3
E	2.1	2.1	3.2	3.2	3.2	4.6	4.6	4.6	E	2.5	3.1	4.6	4.6
H	0.5 to 0.8	0.5 to 0.8	0.8 to 1.1	0.8 to 1.1	0.8 to 1.1	0.8 to 1.1	0.8 to 1.1	0.8 to 1.1	H	0.5 to 0.8	1.1 to 1.5	1.1 to 1.5	1.1 to 1.5

Voltage	V	16	20	25	35	50
Code	C	D	E	V	H	

Frequency coefficient of rated ripple current	Frequency	120Hz	1kHz	10kHz	100kHz or more
Coefficient		0.05	0.30	0.70	1.00

※ φ6.3×8L(φ6.3×8L),φ8×10L(φ8×10.5L),φ10×10L(φ10×10.5L),φ10×12.7L(φ10×13.2L) : The vibration structure-resistant product is also available upon request, please ask for details.  
( ) : Size of the vibration structure-resistant product.

● Dimension table in next page.



■ Dimensions

Rated Voltage (V) (code)	Surge Voltage (V)	Rated Capacitance (μF)	Case Size φD×L (mm)	tan δ	Leakage Current (μA) (at 20°C after 2 minutes)	ESR (mΩ) (20°C/100kHz)	Rated Ripple (mArms/100kHz)		Part Number
							≤105°C (*3)	105°C < ≤125°C (*3)	
16 (1C)	18.4	47	6.3×6	0.12	150	55	1000	390	PCX1C470MCL1GS
		82	8×7	0.12	262	45	1300	530	PCX1C820MCL1GS
		100	6.3×8	0.12	320	33	1500	460	PCX1C101MCL1GS
		150	▲8×10	0.12	480	28	2000	780	PCX1C151MCL6GS
		150	10×8	0.12	480	33	1900	830	PCX1C151MCL1GS
		220	8×12	0.12	704	27	2300	870	PCX1C221MCL1GS
		270	10×10	0.12	864	27	2300	830	PCX1C271MCL1GS
		390	10×12.7	0.12	1248	26	2700	1040	PCX1C391MCL1GS
20 (1D)	23.0	33	6.3×6	0.12	132	60	900	380	PCX1D330MCL1GS
		56	8×7	0.12	224	50	1300	500	PCX1D560MCL1GS
		68	6.3×8	0.12	272	34	1450	470	PCX1D680MCL1GS
		120	▲8×10	0.12	480	29	1900	770	PCX1D121MCL6GS
		120	10×8	0.12	480	35	1800	810	PCX1D121MCL1GS
		150	8×12	0.12	600	28	2200	860	PCX1D151MCL1GS
		180	10×10	0.12	720	28	2300	800	PCX1D181MCL1GS
		270	10×12.7	0.12	1080	27	2700	1020	PCX1D271MCL1GS
25 (1E)	28.7	22	6.3×6	0.12	110	65	900	360	PCX1E220MCL1GS
		39	8×7	0.12	195	55	1200	480	PCX1E390MCL1GS
		56	6.3×8	0.12	280	35	1400	450	PCX1E560MCL1GS
		82	▲8×10	0.12	410	30	1900	760	PCX1E820MCL6GS
		82	10×8	0.12	410	36	1800	800	PCX1E820MCL1GS
		120	▲8×12	0.12	600	29	2200	850	PCX1E121MCL6GS
		120	10×10	0.12	600	29	2200	790	PCX1E121MCL1GS
		180	10×12.7	0.12	900	28	2600	1010	PCX1E181MCL1GS
35 (1V)	40.2	10	6.3×6	0.12	70	85	800	310	PCX1V100MCL1GS
		18	8×7	0.12	126	60	1100	450	PCX1V180MCL1GS
		27	6.3×8	0.12	189	45	1300	450	PCX1V270MCL1GS
		39	▲8×10	0.12	273	35	1800	700	PCX1V390MCL6GS
		39	10×8	0.12	273	41	1700	750	PCX1V390MCL1GS
		56	8×12	0.12	392	33	2000	780	PCX1V560MCL1GS
		68	10×10	0.12	476	30	2200	740	PCX1V680MCL1GS
		100	10×12.7	0.12	700	29	2600	990	PCX1V101MCL1GS
50 (1H)	57.5	5.6	6.3×6	0.12	56	105	700	280	PCX1H5R6MCL1GS
		10	8×7	0.12	100	75	1000	410	PCX1H100MCL1GS
		12	6.3×8	0.12	120	65	1100	380	PCX1H120MCL1GS
		22	▲8×10	0.12	220	37	1700	680	PCX1H220MCL6GS
		22	10×8	0.12	220	56	1400	730	PCX1H220MCL1GS
		27	8×12	0.12	270	35	2000	760	PCX1H270MCL1GS
		33	10×10	0.12	330	31	2200	630	PCX1H330MCL1GS
		47	10×12.7	0.12	470	30	2500	970	PCX1H470MCL1GS

(\*3) Ambient temperature of a capacitor

No marked, [1] will be put at 12th digit of type numbering system.

▲ : In this case, [6] will be put at 12th digit of type numbering system.

• For taping specifications, recommended land size/soldering by reflow and minimum order quantity, please refer to the Guidelines for Aluminum Electrolytic Capacitors.

单击下面可查看定价，库存，交付和生命周期等信息

[>>Nichicon\(尼吉康\)](#)